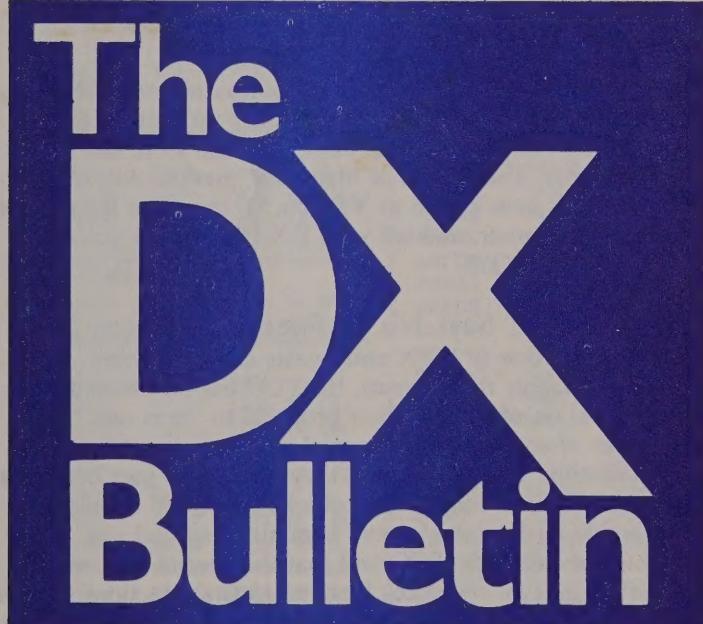


DXpedition News

Sable Island - CY0 The same team that put St. Paul Island CY9DXX on in 1988 will put **CY0DXX** on from Sable (NA-63) Aug. 6-13 or so, depending on transportation. Al VE1AL, Robert VE1BHR, Jack VE1XT, and Bob W5KNE will be on 160-10M, and maybe 6M, CW and SSB. Check 1827, 3505, 7005, 14033, 21033, and 28033 kHz on CW, and 1827, 3795, 7075, 14145, 21195, and 28495 kHz on SSB, listening up. QSL VE1AL.

Bear Island - JW Aksel LA1BGA and Per LA9DAA will be **JW1BGA** and **JW9DAA** respectively July 14-20 from Bear Island (EU-27). Watch 20 kHz up on 10-20M CW, and 14280, 21280, and 28580 kHz on SSB. QSL both calls direct to LA1BGA, Furuvin 9A, N-5032 Minde, Norway, or to home calls via the LA bureau. Also, Ragnar LA7FD will be **JWSFD** through November. (He is **not** going to Guinea-Bissau as J57FD.)

Edited by Chod Harris VP2ML



Wallis Island - FW Four YLs will sign **FW** / July 6-13 on 10-40 meters. Alice N4DDK, Audrey N7HAT, Mary Lou NM7N, and Mary KA0OMX will be on CW and SSB at the bottom of the General Class subbands and in the Extra subbands. QSL to VE7YL.

Fiji - 3D The same operators, minus Audrey N7HAT, move over to Fiji July 13-20. They expect to have their own 3D calls. Again, QSL to VE7YL.

Oblast Valery Voronin UW3DM says he will be on as **UV3DDC/UA0I** from Oblast 138 to Sept. He then moves to Oblast 014, as **UW3DM/RF8Q**. QSL to Box 13, Serpukhov-5, 142205 USSR. Andy Fomenko UA3EAC will add **/RF5Q** to his call during his Oblast 014 operation in Sept. QSL to Box 16, Orel-28, 302028 USSR. UTSON/UA8T will be on to July 3; QSL UA9XFJ.

June 30, 1989

Issue 494

Shortly Noted

- Winnie UZ4FWD is signing **/UH8W** to July 9, and then moves to **/UI8U** to July 25.
- George Rand K2KTT will add **PJ7** from Dutch St. Maarten July 7-10, including the IARU HF Championship. All bands, SSB only. QSL home call.
- Peter ZS8MI says he will alternate CW and SSB each week. On CW, try 14075 kHz, at about 15 wpm. He's also been on 7045 kHz around 0500Z, as well as 14172 kHz, listening 14250-70 kHz, and 28800 kHz. QSL ZS6PT.
- "Bing" Crosby VK2BCH is now active as **3D2XV** from Rotuma, for about a month, SSB only. QSL VK2BCH.
- HS0B has been active many days on 14026 kHz 10-1100Z, working simplex.
- Perry W5STI and wife Martha are active as **VP2MR** and **VP2MBM** to October, on SSB. QSL W5STI after their return.
- HK0HEU says that the Columbian Radio Club is discussing a Malpelo DXpedition for next year. They may even get to the top of the rock, to help the West Coast and Japanese DXers make contacts.
- Members of the Odense DX Group will be active with **/OX** on Greenland July 10-24, 10-40M, mostly CW. Arne OZ1LLC, Bo OZ3ACO, and Rene OZ1LQH can be QSLed via the bureau, or direct to OZ1LLC. (Tnx DXNS.)
- Harry James G3MCN will be **OY** / July 1-8 on all bands; QSL home call.
- The Isle of Man ARS will operate **GD0IOM** and **GD3FLH** July 7-9 on 14250, 21250, and 28525 kHz.
- F6AXP will sign **FV9NDX** from Ré Island (EU-32) July 2-29. QSL FE6AJA. (Tnx LNDX.)
- Moroccan hams can use the **CN60** prefix July 9-15.
- Regulars (callsign, frequency or band, UTC): 3B8DB 20M CW long path 11-1300Z; 4K0F 14005 0530Z; 9J2BO 14031 long path 1400Z; FT4ZE 14006 1130-1230Z; TSCT 14030 long path 1300Z; TA2BK 14025 2300Z or 14198 0030-0300Z; VU2LX 14006 long path 1300Z; Z21FN 14025 long path 1400Z; FH8CB 14220 0300Z; S01MZ 14197 0000Z; VK9LA 14230 1130Z; YJ8JS 14195 1130Z; ZK1DD 14210 0300Z; 9Q5DX 21007 1930Z; 9X5AA 15M CW 19-2200Z; SU1EE 21026 0100Z or 21302 02-0300Z; CN2AQ 21240 0130Z; J52US 21312 0100Z; and 9Q5DX 28015 1600Z.
- SSB net check-ins: 7159 kHz 05-0800Z: 5N9GM CE0ZAM KX6DC KC6JC VK0GC HK0LIT 7P8EG CE0DFL VK9NS; 14250 kHz 00-0300Z: FR5ZD FT4ZE TT8CW 3A2EE SU1EK 5T5HH YK1AO A61AC 3X1SG TA1AZ; 14226 kHz: TU2JL T5MF 9M6HF BV2FA VS6EL.
- RTTY reports: **UA3TT/RG1** will be active to June 10. He's been reported on 14082 kHz at 02-0400Z. Some active RTTY stations: UZ4FWD 14090 2300Z; EA8RA 14087 0600Z; TI2YP 14096 0330Z; ZK1CT 14090 0630Z; KX6GL 14095 0945Z; WA4ZEL/JW 14094 2300Z.

Important Notice: Issue 495 of The DX Bulletin will be mailed one day late, due to the July 4th holiday. Expect a slight delay in receipt. Included with Issue 495 is the 1989 **Most Wanted Countries** survey form. Please take a moment to complete the survey, and return it as soon as possible, so that we can publish the results this Fall. Thanks. -ed.

Propagation

Forecast and Historical Data

| Day | Forecast | 27 Days Before | | 55 Days Before | | | | | |
|-----------|--------------|----------------|--------|----------------|------|--------|-----|-------|---|
| | | Date | Flux A | K | Date | Flux A | K | | |
| June 1989 | Low Normal | 6/03 | 200 | 11/20 | 3 | 5/06 | 194 | 17/19 | 2 |
| 30 | Low Normal | | | | | | | | |
| July | | | | | | | | | |
| 1 | High Normal | 6/04 | 218 | 11/18 | 2 | 5/07 | 200 | 35/45 | 4 |
| 2 | High Normal | 6/05 | 209 | 08/12 | 3 | 5/08 | 208 | 04/10 | 1 |
| 3 | High Normal | 6/06 | 211 | 14/12 | 3 | 5/09 | 203 | 06/10 | 1 |
| 4 | Below Normal | 6/07 | 201 | 30/35 | 3 | 5/10 | 207 | 03/08 | 1 |
| 5 | High Normal | 6/08 | 218 | 19/20 | 5 | 5/11 | 200 | 07/09 | 2 |
| 6 | Low Normal | 6/09 | 236 | 21/28 | 3 | 5/12 | 195 | 08/17 | 2 |
| 7 | Disturbed | 6/10 | 266 | 42/64 | 5 | 5/13 | 194 | 06/09 | 3 |
| 8 | High Normal | 6/11 | 266 | 16/22 | 3 | 5/14 | 190 | 06/12 | 1 |
| 9 | High Normal | 6/12 | 284 | 17/19 | 3 | 5/15 | 192 | 08/14 | 3 |
| 10 | High Normal | 6/13 | 309 | 14/17 | 3 | 5/16 | 186 | 05/09 | 2 |

Propagation Watch

Solar activity returned to more normal levels after the flux peak of 327 on June 15, and so did the geomagnetic field. Flux dropped 100 points in a week, but remained well above 200, giving DXers good high-band propagation, limited mainly by seasonal depression of the maximum useable frequency (MUF). Even 10 meters opened briefly.

But far better news than the drop in solar flux was the extremely quiet geomagnetic field. As happened in mid-May (although not 27.5 days previously), the A index dropped to single digits for days at a time. This gave knowledgeable DXers some of the best long-path propagation we have seen. (The long path includes more hops than short path, and usually passes near the normally-disturbed polar regions, and is thus very sensitive to the level of geomagnetic activity.) Low A and K indices for several days, coupled with above-average flux, give us great long-path openings.

June 17-20 was a great time for pointing your beam in the 'wrong' direction. Not only was the 20-meter long path very productive, but the elusive 10-meter long path was open for up to an hour at a time. Many Japanese stations were logged in the midwest around 1200-1300Z. 15 meters also had strong long-path signals.

The forecast suggests conditions will deteriorate around July 4, as the previous-active sunspot regions 5328 and 5533 come around this side of the sun. Look for the solar flux to increase, with occasionally below-normal conditions due to solar flares. If the geomagnetic field remained quiet for a couple of days, be sure to check the long paths; you may be very pleasantly surprised. And remember that the 'long path' is not exactly 180° away from the short path; most 'long paths' are skew paths. Try 20-30° either side of the published long-path bearing. Good hunting!

DX Gatherings

■ The Atlanta Ham Fest July 8-9 in Georgia will include the Southeastern DX Club's annual banquet on Saturday. Guest speaker is Eric Scace K3NA, who will discuss his Rotuma **3D2XX** operation that resulted in a new country on the DXCC list. There will be a DX and contest forum at the Ham Fest, followed by a cash bar at 1800 local in the London Amsterdam Room in the Crown Plaza Hotel, with dinner at 1930 EDT. Cost is \$22, and reservations should be sent to Allan Bond WB4GNT, 221 Greencrest Ct. NE, Marietta GA 30068.

■ The annual Northwest DX Convention will be held July 28-30, at the Holiday Inn in Renton, WA, hosted by the Western Washington DX Club. Scheduled presentations include DX packet spotting networks, Rotuma **3D2XX** by Kip Edwards W6SZN, P40V by Bill Edwards K7RIE and Mark Allen WJ7X, Japanese awards, Rescue in Armenia, Rush Drake W7RM, and a Sunday breakfast talk by Chip Margelli K7JA on the recent **4J1FS** M-V Island DXpedition. Registration is \$14 without meals, \$39 with Saturday banquet, and \$43 with banquet and breakfast. Send checks to WWDXC, P.O.Box 224, Mercer Island WA 98040.

No More Burma

You can cross the name of Burma off your DXCC lists, as Burma is no more. The country we used to call Burma officially changed its name on June 19 to the Union of Myanmar. The capital of Myanmar, marked on maps as Rangoon, is now known as Yangon. So cross out Burma and write in Myanmar, and tell your DX friends that you don't need a Burma QSL.

FCC Says Nix to Special Callsigns

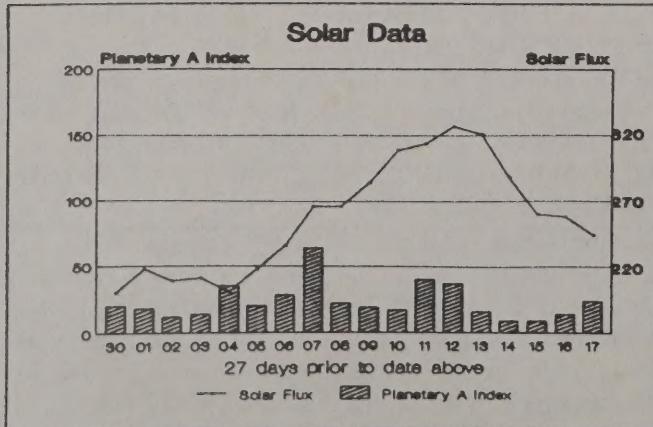
In a blow to WPX enthusiasts and promoters of special amateur radio events, the FCC has terminated consideration of PRB-3, their proposal to 'farm out' the issuance of secondary and special calls to a private organization. The ARRL said they wanted no part of such a plan, but several other organizations submitted detailed proposals for how they would administer special and additional calls. The FCC said that the special calls would divert significant resources from more vital functions such as handling normal license applications, even with outside help.

DX Man of the Year

The World-Wide Listeners Foundation (WWLF) is asking for your vote to the best DX man (or woman?) of the year 1989. Send your vote (and two IRCs for more information about the election) to WWLF, P.O.Box 124, 28113 Luce Cedex, France. [Based on the first six months of 1989, the clear choice would be Martti Laine OH2BH for his XF4L, S01MZ, and 4J1FS operations. -ed.]

3V8AZ Operators Die in Plane Crash

DX News Sheet reports that Marcel Aouizerate F2SA and Henri Belmont F1HJW, who recently operated as **3V8AZ** from Tunisia, were killed when their light plane crashed in the Spanish Pyrenees. Their families have said that they do not wish to receive QSL cards for 3V8AZ. The French DX Foundation is attempting to obtain logs and will handle QSL duties in memory of the operators, if possible. Meanwhile, please don't QSL 3V8AZ.



B . A . N . D . P . A . S . S

Key to Bandpass: Callsign, frequency, UTC, day of the month, state. * = long path. P = packet.
All "portable" calls listed with country of operation first, regardless of format used on the air.

RTTY

| | | | | |
|--------|-------|------|----|----|
| 4U1UN | 14083 | 2042 | 13 | NY |
| 5W1AB | 14091 | 0345 | 16 | WA |
| 5Z4BH | 21091 | 1900 | 22 | CA |
| 9M6HF | 14088 | 1053 | 6 | HP |
| EA8IY | 14081 | 0530 | 20 | CA |
| HC1CH | 14089 | 2250 | 14 | OH |
| HI8EL | 14091 | 0058 | 14 | OH |
| J37EH | 14086 | 0605 | 18 | CA |
| J6LIH | 14094 | 2350 | 18 | CA |
| JW/ | 14088 | 2020 | 20 | CA |
| WA4ZEL | | | | |
| OH2BGD | 14080 | 0435 | 23 | CA |
| OK2BXW | 14090 | 0540 | 18 | OH |
| RB5TV | 14091 | 0130 | 14 | OH |
| SU1EE | 21089 | 0148 | 18 | NY |
| TI2US | 14082 | 0555 | 18 | CA |
| UC1AWW | 21083 | 1927 | 17 | NY |
| UZ4FWD | 14086 | 2210 | 16 | OH |
| UZ4FWD | 14088 | 0330 | 19 | CA |
| YO6JN | 14087 | 0320 | 16 | WA |
| ZS3GB | 21090 | 1720 | 18 | OH |

75 Meters

| | | | | |
|--------|-------|------|----|----|
| VK0GC | 3796 | 1233 | 12 | WA |
| VK6HQ | 3794 | 1245 | 16 | WA |
| CE0DFL | 21295 | 0250 | 18 | CA |

40 Meters

| | | | | |
|---------|------|------|----|----|
| A22BW * | 7003 | 1420 | 18 | WA |
| HK0LIT | 7159 | 0544 | 18 | CA |
| KG4SM | 7012 | 1041 | 24 | FL |
| RO4OR | 7008 | 0022 | 21 | FL |

30 Meters

| | | | | |
|-------|-------|------|----|----|
| RB5WW | 10106 | 0155 | 14 | MD |
| VK3BG | 10106 | 1221 | 17 | PA |

20 Meter CW

| | | | | |
|---------|-------|------|----|----|
| 3B8CF | 14031 | 0303 | 11 | GA |
| 3B8DB | 14017 | 1130 | 15 | CO |
| 3B8DB * | 14015 | 1112 | 14 | MA |
| 3B8FE | 14041 | 0237 | 11 | GA |
| 3B8FQ * | 14008 | 1307 | 19 | MT |
| 3B9FR | 14030 | 1055 | 9 | IA |
| 3B9FR * | 14035 | 1151 | 16 | MA |
| 3D2AG | 14021 | 1320 | 18 | CA |
| 3D2EL | 14025 | 1210 | 13 | GA |
| 4K0F | 14005 | 0524 | 19 | ID |
| 4K1DV | 14003 | 0750 | 18 | CA |

Antarctica

| | | | | |
|---------|-------|------|----|----|
| 4S7GF * | 14008 | 1206 | 15 | MN |
| 4S7NE * | 14005 | 1122 | 19 | CA |
| 4S7VJ * | 14006 | 1129 | 16 | MA |
| 5Z4FM | 14022 | 1331 | 19 | MA |
| 6W6JX | 14025 | 0633 | 21 | NY |

| | | | | |
|--------|-------|------|----|----|
| 6W6JX | 14019 | 1109 | 24 | FL |
| 7X4VUK | 14056 | 2357 | 10 | MI |

| | | | | |
|-------|-------|------|----|----|
| 9J2BO | 14030 | 1350 | 17 | CA |
| 9M2FS | 14020 | 1047 | 24 | FL |

| | | | | |
|---------|-------|------|----|----|
| 9M2FS * | 14014 | 1104 | 16 | MA |
| 9N2RU | 14027 | 1400 | 20 | CO |

| | | | | |
|-------|-------|------|----|----|
| 9V1JY | 14009 | 1226 | 15 | MN |
| A41JV | 14011 | 1405 | 11 | CA |

| | | | | |
|---------|-------|------|----|----|
| A61AC * | 14008 | 1345 | 17 | CA |
| BY4RB | 14027 | 1220 | 12 | CA |

| | | | | |
|-------|-------|------|----|----|
| C53AT | 14005 | 0440 | 13 | CA |
| C53AT | 14010 | 0015 | 16 | FL |

| | | | | |
|-------|-------|------|----|----|
| EA8AB | 14002 | 0710 | 17 | CA |
| EL2FO | 14014 | 1150 | 19 | CA |

| | | | | |
|-------|-------|------|----|----|
| FR4FD | 14026 | 1305 | 16 | NH |
| FT4ZE | 14006 | 1135 | 13 | CA |

| | | | | |
|---------|-------|------|----|----|
| HK0EHM | 14015 | 2326 | 22 | FL |
| HL1CG * | 14020 | 1059 | 16 | MA |

HS0B

HS0B *

HZ1AB

S01MZ *

S01MZ

T5CT *

TA2BK

TL8RM

TL8RM

TQ0DXC

UD6D/

UA3YBA

UH8AAG

UI8AA

U18GBL

V85AA *

V85DA

VK9NS

VP2EXX

VU2LX

VU2LX *

VU2SU

VU2TTC *

Z21FN *

ZV7WX

20 Meter SSB

1Z9B

3D2AG

3DA0AH *

4S7NB

4S7NS *

4S7VK *

5V7TM

7X4VU

9K2CS

9L1TH

9N1MC

9N1MC *

A22RA

BV/KC3EK

BY4AA

BY5RC

CE0GHO

D44BC

EA8BBH

EA8BCN

FH8CB

FK8FI

H44SH

HH2BM

HS0B *

J52US

JW/

WA4ZEL

JX7DFA

KC4USV

Antarctica

KC6JC

Eastern Carolines

KH0AC

P20PMS

P29CG

PY0FF

S01MZ

S01MZ

SU1EE

T30BC

T32AB

T4225

T5MF

TA2BK

TT8CW

TU2UI

UA1O/

UA0BEZ

UI8ZAA

UI9BWE

VKOMP

Antarctica

VK9LA

Lord Howe

VQ9PB

VU2WAP *

YJ8JS

ZD7CW

ZK1DD

South Cook Islands

ZS8MI *

17 Meter CW

6W6JX

17 Meter SSB

9K2EL

LU7MAO

VK3YV

VU2WAP

15 Meter CW

3B8CF

7X3DA

9Q5DX

9Q5UN

9X5AA

A41JV

BY9GA

HL5BDS

JT1KAA

JX7DFA

JY9SR

KG4XO

LU2ZC

LZ1RO

PZ1CP

RF2F/

UA3TT

RI8AD

RV0YF

Zone 23

SU1EE

TA1AZ

TA2BK

UA1O/

UA0BDU

UC2LBF

UC2LT

UD6DF

UI8AG

UI8GBK

UI9IWZ

UI9UWA

UI9UWA

UL7DX

UL7GE

UL7VV

YB2F

ZD8SE

ZX1DFF

15 Meter SSB

4S7EA

5N7DKF

5Z4BP

6T2MG

9K2KS

9Q5DX

9Q5XX

POSTMASTER: Send address changes to
Class postage paid at Santa Rosa, CA.
Class Mail, US\$50 Foreign Mail, \$38 First
rates are \$29 Second Class Mail, \$38 First
Compu-Service 7575, 737 One-year subscription
Telephone (707) 523-1001, Fax (707) 523-0852.
ISSN 0279-8077 is published fifty times
per year at P.O. Box 50, Fulton, CA 95439.
above address.

I 498 YOUR SUBSCRIPTION ENDS 89/10

TEMPLE HILLS MD 20748
5801 HUNTLAND ROAD
ALFRED A LARU K3ZO
5801 HUNTLAND ROAD

First Class
U.S. Postage Paid
Santa Rosa, CA
Permit No. 550

FIRST CLASS MAIL

P.O. Box 50
Fulton, CA 95439
U.S.A.



Calendar

Issue 494 - June 30, 1989

(Changes and hot info in **boldface**.)

Amsterdam Island FT4ZE 14006 1130-1230Z
Antarctica KC4USV 14205 10-1400Z
Canary Islands - EA8 OH2BH/EA8 to August
Cayman Islands - ZF ZF2s AH, JT July 1-28
Chad- TT TT8CW 14004 2330-0100Z
Conway Reef - 3D Nov. 3-13 by OH1RY et al
Dominica - J7 J79T July 4-18
Easter Island CE0 CE0GHO 20M SSB 0300Z
Eastern Carolines KC6JC 20M SSB 1200Z
Egypt - SU SU1EE 21026 003-0330Z
21302 kHz 0200-0300Z
SU1EK 21270-80 0030-0200Z

Faroe Islands - OY OY/G3MCN July 1-8
Fiji - 3D by YLs July 13-20
Greenland - OX by OZs July 10-24
Guantanamo - KG KG4XO 21032 2200, 0300Z
Guinea-Bissau - J5 J52US 21312 kHz 0100Z
Indonesia - YB YB21AR July 8-9
Iraq - YI YI1BGD 21260 0245Z
Ivory Coast - TU TU2JL 20M SSB 0430Z
Jan Mayen - JX JX7DFA 14010 2330-0100Z
Jordan - JY JY9SR 20M CW 0145Z
Kuwait - 9K 9K2KS 21250-265 00-0200Z
Macquarie - VK0 VK0GC 14160-200 0400Z
Malta - 9H 9H1IN by HB9DLE July 26-Aug 3
by HA8s June 28-July 10

Mariana Islands KH0 KH0AC 20M SSB 10-1100Z
Marion Island - ZS8 ZS8MI 14075 CW 1300Z+
14172 1300Z, listening 14250-260

Mauritius - 3B 3B8DB 14014 long path 1200Z
Mayotte - FH 3B8CF 14032 1300, 0245Z
Mongolia - JT FH8CB 14220 kHz 0300Z
Morocco - CN JT1BR 14026 1400Z
Nicaragua - YN CN2AQ 21240 kHz 0130Z
Oblasts - 042 RJ7R
 003 UD6K UBSJRR early July
 055 UI8U UZ4FWD July 10-July 25
 045 UH8W UZ4FWD June 25-July 9
 138 UA0I UV3DDC to September
 014 RF8Q UW3DM September
 174 UA8T UA3EAC/RF5Q September
Ogasawara - JD1 UT5ON to July 3
Oman - A4 JA1SGU/JD1 July 14-17
A41KJ 14170-185 13-1400Z LP

| | | | |
|------|----------------------|-------------------------------|------|
| I494 | Revillagigedo - XF4 | XF4F 14300 1500 or 1600Z | I491 |
| I493 | Rodriguez - 3B9 | 3B9FR 14195 1100Z long path | I491 |
| I492 | Rotuma - 3D | 3D2XV by VK2BCH Now | I494 |
| I485 | Rwanda - 9X | 9X5AA 21360 kHz 1900Z Tuesday | I493 |
| I493 | Sable Island - CY0 | CY0DXX Aug. 6-13 | I494 |
| I492 | St. Maarten - PJ | PJ7/K2KTT July 7-10 SSB | I494 |
| I488 | St. Pierre - FP | FP/K1RH June 30-July 7 | I490 |
| I493 | Sao Tome - S9 | S92LB 21280 2100Z | I493 |
| I492 | Seychelles - S7 | S79J 14190 12-1400Z | I493 |
| I493 | Somalia - T5 | T5MF 20M SSB 1230-1400Z | I493 |
| I494 | | T5CT long path 14030 1300Z | I494 |
| I492 | South Georgia - VP8 | VP8BUB 28470 1630Z list | I481 |
| I494 | South Shetlands | HL5BDS 28020 14-1700Z | I493 |
| I494 | Sri Lanka - 4S | 4S7EA 21300 0000Z | I493 |
| I493 | Svalbard - JW | JW1BGA, JW9DAA July 14-20 | I494 |
| I493 | Taiwan - BV | K7OWJ/BV July 11-18 | I493 |
| I494 | Thailand - HS | HS0B 14026 kHz 10-1100Z | I494 |
| I493 | Turkey - TA | TA2BK 14025 2300Z, 14198 0030 | I494 |
| I492 | | TA3F 21309 2245Z | I493 |
| I491 | United Arab Emirates | A61AC 14250 0300Z, A61AB | I492 |
| I493 | Uzbekistan - UI | UI8AA 20M CW 23-0100Z | I493 |
| I493 | Wallis - FW | by YLs July 6-13 | I494 |
| I492 | Western Sahara - S0 | S01MZ 14197 kHz 0000Z | I494 |
| I492 | Zimbabwe - Z2 | Z21FN long path 14025 1400Z | I494 |

DX Activities and Contests

| Date | Event or Activity | Info |
|----------|------------------------|------|
| July 1-2 | Venezuelan Contest SSB | CQ |
| July 8-9 | IARU HF Championship | QST |

Contributors

This Issue of The DX Bulletin would not have been possible without the invaluable assistance of the following:
KH6BZF, SESC, AA4NC, AB8K, AE1H, AG4S, HP1AC,
K0CVD, K0KES, K1HDO, K1JKS, K1NIT, K2OLG, K4BAI,
K6IR, K7JBQ, K8NN, K8RWL, KA3DBN, KA6A, KB1NS,
KC8FS, KC9AL, KD0ZR, KE7X, KE9OR, KI4TF, KI8W,
KJ4BK, KJ8M, KM4KJ, KM9J, KN7K, N2HOS, N6AHU,
N6IBP, N6JQL, N6NXV, N9QX, ND3A, ND9X, NV4A,
NX7K, VE1YX, VE3NN, W0MOX, W1BFT, W1CYB, W1HH,
W1OT, W1UN, W3FG, W3FME, W4JVN, W4VQ, W5SUV,
W6BJI, W6JOX, W6QX, W6UQF, W8KJP, WA1NPZ,
WA2MZX, WA9AQE, WB2UZR, WB4OSN, WB8ZRL,
WC6I, WD9GGY, WX7K, WY5Q, KA1BSZ, KD0JL, VE1AL,
LA8CJ, KA4YAE, W0JRN, K2KTT, W5STI, K6DQ, W1AW,
KC3EK, KT7H, DXNS, LNDX, and NCDXC. (Thanks to each and every one! -ed.)